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(54) Title: LIQUID PHASE PROCESS FOR THE POLYMERIZATION OF ALPHA-OLEFINS

(57) Abstract: A liquid-phase process for polymerizing α -olefins of the formula $\text{CH}_2=\text{CHR}$, where R is H or an alkyl radical C1-C6, to produce a polymer that is soluble in the reaction medium, comprising the steps of: a) continuously polymerizing in liquid phase the α -olefin in the presence of a catalyst system based on a transition metal compound; b) continuously withdrawing from step a) a solution of polymer in the liquid reaction medium; c) mixing in one or more mixing stages said solution of polymer in the reaction medium with an organic deactivator having: at least a hydroxy group, a boiling point higher than 150°C, and a ratio between the molecular weight (MW) and the number of hydroxy groups (OH) comprised between 20 and 100.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 747 612 A (MUHLE MICHAEL ELROY ET AL) 5 May 1998 (1998-05-05)	1
Y	column 5, line 31 - line 44; claims; example 1 ---	1-9
Y	US 4 701 489 A (PELLON BRIAN J ET AL) 20 October 1987 (1987-10-20) cited in the application claims ---	1-9
Y	EP 0 449 519 A (SHELL OIL CO) 2 October 1991 (1991-10-02) page 5, line 38 - line 39; claims ---	1-9
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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